

Title (en)

Nuclear magnetic resonance imaging method.

Title (de)

Verfahren zur Bilderzeugung mittels kernmagnetischer Resonanz.

Title (fr)

Procédé de production d'image par résonance magnétique nucléaire.

Publication

**EP 0103397 A2 19840321 (EN)**

Application

**EP 83304578 A 19830808**

Priority

GB 8223331 A 19820813

Abstract (en)

A method of deriving three dimensional image information from an object using nuclear magnetic resonance signals is described. The method comprises subjecting the object to a continuous, static magnetic field and carrying out the following set of sequential steps. 1. Exciting nuclear spins in a volume; 2. applying non-aligned first ( $G_{\text{sub}}x^{(2)}$ ), second ( $G_{\text{sub}}y^{(2)}$ ) and third ( $G_{\text{sub}}z^{(2)}$ ) gradients of the magnetic field; 3. causing the spins to rephase periodically in the presence of the first gradient ( $G_{\text{sub}}x^{(3)}$ ); 4. phase encoding the spins in the direction of the second gradient ( $G_{\text{sub}}y^{(3)}$ ) prior to every read-out of the rephased FIS from the object; and then successively repeating the above set of steps with different values of gradient of the third gradient ( $G_{\text{sub}}z^{(2)}$ ), there being a recovery interval between the repetition of successive sets of steps.

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IPC 8 full level

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CPC (source: EP US)

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Cited by

EP0142343A3; EP0611130A1; EP0303452A3; EP0181015A1; EP0165610A3; FR2623907A1; EP0109517A3; EP0307064A3; EP0205223A1; EP0177990A1; DE3537875A1; DE3504734A1; EP0191431A3; US4707658A; DE3504734C2

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